

### AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

**In the claims**

1.-28. (cancelled)

29. (previously presented): The method of Claim 50, wherein said irradiating step is performed by emitting a light energy having a wavelength of about 240 nm to about 280 nm.

30. (previously presented): The method of Claim 50, wherein said irradiating step is performed by emitting light energy having a wavelength in the red visible range.

31. (previously presented): The method of Claim 50, wherein said irradiating step is performed by exposing the walls to radiation emitted by a radioactive pellet.

32. (previously presented): The method of Claim 50, wherein said irradiating step is performed by moving an energy delivery device along the airway.

33. (previously presented): The method of claim 50, wherein irradiating walls of the airway also causes debulking over time in mucus gland cells and prevents the mucus gland cells from replicating.

34. (original): The method of Claim 33, wherein said irradiating step is performed by emitting a light energy having a wavelength of about 240 nm to about 280 nm.

35. (previously presented): The method of Claim 33, wherein said irradiating step is performed by emitting light energy having a wavelength in a the red visible range.

36. (original): The method of Claim 33, wherein said irradiating step is performed by exposing the walls to radiation emitted by a radioactive pellet.

37. (original): The method of Claim 33, wherein said irradiating step is performed by moving an energy delivery device along the airway.

38. – 49. (cancelled)

50. (currently amended): A method of treating asthma to relieve asthmatic symptoms, the method comprising:  
providing a source of energy; and  
irradiating walls of an airway of an asthmatic lung with the source of energy at a wavelength and intensity which, over time, causes debulking of smooth muscle tissue of the asthmatic lung and prevents the lung tissue from replicating, wherein said irradiating step is performed by irradiating smooth muscle tissue in the asthmatic lung such that the ability of the smooth muscle to contract is reduced.

51. (cancelled)

52. (previously presented): The method of claim 50, further comprising placing a visualization system into the airway.

53. (previously presented): The method of claim 52, wherein the visualization system comprises an endoscope or bronchoscope.

54. (previously presented): The method of claim 32, wherein moving the energy delivery device along the airway comprises moving the energy delivery device in a uniform painting-like motion.

55. (previously presented): The method of claim 54, wherein moving the energy delivery device in the uniform painting-like motion comprises moving the entire energy delivery device either manually or by motor.

56. (previously presented): The method of claim 50, wherein irradiating walls of the airway with the source of energy comprises using an energy selected from a group consisting of infrared, visible, and ultraviolet.

57. (previously presented): The method of claim 56, wherein irradiating walls of the airway with the source of energy comprises using incoherent light.

58. (previously presented): The method of claim 56, wherein irradiating walls of the airway with the source of energy comprises using coherent light.

59. (previously presented): The method of claim 50, wherein irradiating walls of the airway with the source of energy comprises irradiating the walls of the airway at an intensity sufficiently bright to penetrate mucus in the airway.

60. (previously presented): The method of claim 50, further comprising delivering a photo-activatable substance to the airway.

61. (previously presented): The method of claim 60, wherein the photo-activatable substance comprises a psoralen.

62. (previously presented): The method of claim 60, wherein an absorption spectrum of the photo-activatable substance is matched to the source of energy.